PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US ROUTE 219 AND GLENDALE ROAD, IN GARRETT COUNTY, MARYLAND. US 219 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION IS TO OPERATE IN A NEMA FIVE (5) PHASE, FULL-TRAFFIC ACTUATED MODE. THERE WILL BE AN EXCLUSIVE PERMISSIVE LEFT TURN PHASE FOR SOUTHBOUND US 219. THE US 219 MOVEMENTS WILL OPERATED CONCURRENTLY. THE GLENDALE ROAD AND COMMERCIAL ENTRANCE THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. VIDEO DETECTION WILL BE USED FOR PRESENCE DETECTION.

SPECIAL NOTE

Upon completion of this project, the Contractor shall notify Mr. Robert Snyder of SHA at 410-787-7635 to arrange for the phone line installation. The Contractor is to provided Mr. Snyder with the nearest street address, zip code, and phone number.

EQUIPMENT TO BE FURNISHED BY SHA

9002	1	EA	DETECTOR AMPLIFIER 4-CHANNEL RACK MT.
9081	1	EA	CABINET INTERSECTION MONITOR, SIZE 6
9087	1	EA	CONTROLLER ASC II WITH TELEMETRY
9089	160	SF	FLAT SHEET ALUMINUM, SIGN - YELLOW, ORANGE, & SILVER

EQUIPMENT TO BE FURNISHED BY AND/OR INSTALLED BY THE CONTRACTOR

1001	1	EA	MAINTENANCE OF TRAFFIC
1004	1	EA	MOBILIZATION FOR ASSIGNMENTS OUTSIDE OF CONTRACT AREA
2001	4	CY	TEST PIT EXCAVATION
5001	180	LF	5 INCH YELLOW HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5002	45	LF	5 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5004	100	LF	24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5006	1	EA	HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
5007	250	LF	REMOVE PAVEMENT MARKINGS ANY WIDTH
8001	15	CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8017	2	EA	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FOOT LEAD-IN
8020	1	EA	INSTALL CONTROLLER AND CABINET
8021	65	LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	10	LF	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	70	LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8027	590	LF	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8029	350	LF	FURNISH AND INSTALL 3 INCH SCHEUDLE 80 RIGID PVC COUNDUIT-BORED
8030	40	LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8032	200	LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
8033	13	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	4	EA	FURNISH AND INSTALL GROUND ROD -¾INCH DIAMETER X 10 FOOT LENGTH
8036	2	EA	FURNISH AND INSTALL CONNECTOR KIT TYPE 2
8044	100	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8045	1100	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8046	400	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TYPE TC
8048	260	LF	FURNISH AND INSTALL NO 6 AWG STRANDED BARE COPPER GROUND WIRE
8049	100	LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO.4 AWG-THHN/THWN
8051	85	LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCH X 6 INCH
8052	100	SF	INSTALL GROUND MOUNTED SIGN
8053	60	SF	INSTALL OVERHEAD SIGN
8055	2	EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8056	2	EA	FURNISH AND INSTALL 15' LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8060	1	EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8065	30	LF	FURNISH AND INSTALL 1 INCH RIGID METAL ELECTRICAL GALVANIZED CONDUIT RISER
8066	1	EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, 1 PHASE 3 WIRE SYSTEM)
8081	1	EA	FURNISH AND INSTALL MAST ARM POLE AND TWIN (50 FT/ 60 FT) OR (60 FT/ 50 FT) MAST ARM
8082	1	EA	FURNISH AND INSTALL MAST ARM POLE AND TWIN (50 FT/ 70 FT) OR (70 FT/ 50 FT) MAST ARM
8084	26	EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8085	5	EA	FURNISH AND INSTALL 8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
NEG	1	EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
NEG	3	EA	FURNISH AND INSTALL DETECTION CAMERA
NEG	3	EA	FURNISH AND INSTALL 250 FT VIDEO CABLE

*ALL EXISTING EQUIPMENT TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR

CONTACT LIST

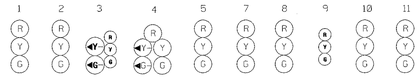
Mr. Fred Crozier, District Engineer
Phone: (301) 729 - 8486

Mr. Larry Humberston, District Utility Engineer
Phone: (301) 729 - 8439

Mr. Edward Rodenhizer, Chief
SHA Traffic Signal Shop
Phone: (410) 787 - 7650

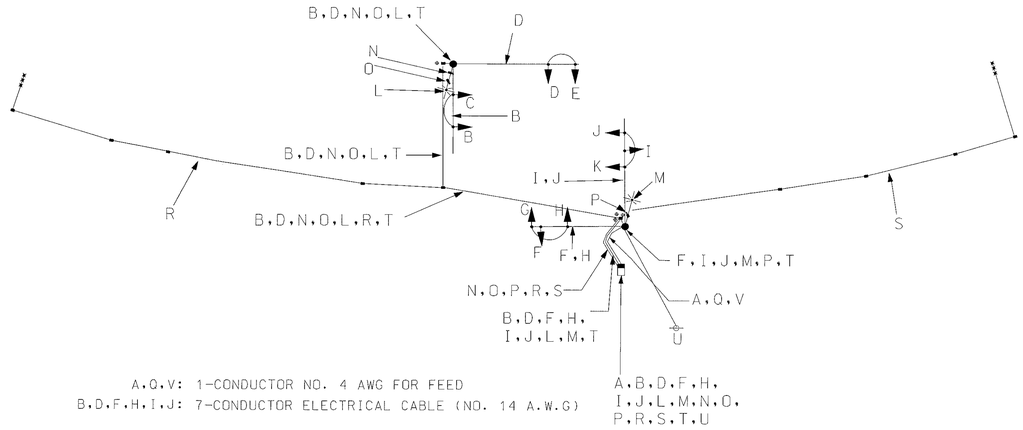
Mr. Richard Daff Sr., Chief
Traffic Operations Division
Phone: (410) 787 - 7630

PHASING CHART



Phase 2 & 5	R	R	◄G-G	◄G-G	G	R	R	R	R	R	← ↓
5 Change	R	R	◄Y-R	◄Y-R	R	R	R	R	R	R	
Phase 2 & 6	G	G	G	G	G	R	R	R	R	R	← →
2 & 6 Change	Y	Y	Y	Y	Y	R	R	R	R	R	
Phase 4 & 8	R	R	R	R	R	G	G	G	G	G	↓ ↑
4 & 8 Change	R	R	R	R	R	Y	Y	Y	Y	Y	
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	↕ ↕

WIRING DIAGRAM



A,Q,V: 1-CONDUCTOR NO. 4 AWG FOR FEED
B,D,F,H,I,J: 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

C,E,G,K: 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

L,M: 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G)

N,O,P: AUTOSCOPE WIRE

R,S: MICROLOOP PROBE

T: STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G)

U: PROPOSED POWER SERVICE

Φ PROPOSED GROUND ROD

REVISIONS	APPROVALS
	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

US 219 AT GLENDALE ROAD

DRAWN BY:	B. KIEDROWSKI	F.A.P. NO.		TS NO. 4096	SHEET NO. 2 OF 2
CHECKED BY:		S.H.A. NO.	XXI005785		
SCALE:	NONE	COUNTY:	GARRETT	T.I.M.S. NO. E406	
DATE:	5/15/01	LOG MILE:	1102\919.56		